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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/300,482

DATE: 05/10/1999
TIME: 14:57:19

Input Set: I300482.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

1 <110> APPLICANT: Cheikh, Nordine
2 Liu, Jingdong
3 Peschke, Virginia M.
4 <120> TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated Wit
5 Phosphogluconate Pathway
6 <130> FILE REFERENCE: 04983.0031.US01/38-21(15365)B
7 <140> CURRENT APPLICATION NUMBER: US/09/300,482
8 <141> CURRENT FILING DATE: 1999-04-28
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16 attgaatgag gcaatctctg agtatgagac ttcagaaaac aatgactcgg gaagctaccg 120
17 cagattatatt tatttggcat tgccctccatc agtctaccca tcagtatgcg agatgataag 180
18 atcatattgc atgagtccat cttcacacac cggttggaca agggttattg ttg 233
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20 <211> LENGTH: 180
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26 gccagaaga agatcttccc ggccctcttc gcttgttct acgagggtcg gctcccgag 180
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28 <211> LENGTH: 137
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34 gaatctccat tatgccg 137
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37 <212> TYPE: DNA
38 <213> ORGANISM: Glycine max
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40 <223> OTHER INFORMATION: unsure at all n locations
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44 caatatcttc tttcaaactt tcaggaaaag caaatatata gaattganca tctactagga 180

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W-->

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W--> 68 ggaaggaatc ncattgnaaa tcttacagtt tnaaggtttt caaatctagt ttttgagcca 180
W--> 69 ctttgagatc gtacttanat aagataatgt agcaggncat ttatcagagg ncttggtgtg 240
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W--> 80 ctagttaatcc gngctgcta gaggatggga actagttaat ggcatatcga gcgaagatct 180
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92 <211> LENGTH: 287
93 <212> TYPE: DNA
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W--> 100      gatctagctt cggctctgaa tcccccttag caaganangc aggaaatgtg cctganactg    180
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112      gaatccccct agcaagagag gcaggaaatg tgctgaaac tgggtcactc tctattgtgg    180
113      tgcttggtgc ttctggtgat cttgctaaga agaagacatt tctgcactt ttccacctat    240
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124      ttagcaagat atgcaggaan tgtgacctgaa actgggtcac tctctattgt tgtgcttggc    180
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148 gcaccgtcca ctccctgtc cctttcatcc cggctctgtc aaggaccttg tccaccaggt 180
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150 tcaggagctc gcccttggtc cactcggaga acacctggtg cagctcactg ttggtgagct 300
W--> 151 taccgaccga cttgagaacg tcgtatgcct nggaaatcaa ctgcatatcg gcatactcga 360
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163 cagaaggaaa ccttcccgctc tacggcttcc atgacccgc gtcctttgtg aagtccattc 180
164 agaagccacg ggtggtgatc atgctcgctc aggcggcgcc gccagttgac cagaccatcg 240
W--> 165 cgacgctcgc agctcacttg gagcagggcg actgcatcat cgatgggggg aacgagtggg 300
166 acgagaacac ggagaggagg gagaaggcca tggaggagcg cggcctnctg tatcttgga 360
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175 tcggtcttgc tggccttgcg gtcattggggc agaaccttgc cctcaacatt gcagagaaaag 180
176 ggttcccatc ctctgtgtac aacaggacaa ccttcaaggt ggacgagacc gtgcagcgtg 240
177 ccaaggcaga aggaaacctt cccgtctacg gcttccatga ccccgcgctc tttgtgaagt 300
178 ccattcagaa gccacgggtg gtgatcatgc tcgtcaaggc cggcgcgcca gttgaccaga 360
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188 gcagcgcgcc agctccatag ttagaggaga gatggcgctc acaagaatcg gtcttgctgg 180
189 ccttgcggtc atggggcaga accttgccct caacattgca gagaaaggg tccccatctc 240
190 tgtgtacaac aggacaacct ccaagggtga cgagaccgtg cagcgtgcca aggcagaagg 300
191 aaaccttccc gtctacggct tccatgacct cgcgtccttt gtgaagtcca ttcagaagcc 360
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194 <211> LENGTH: 409

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200   ccttgcggtc atggggcaga accttgccct caacattgca gagaaagggt tccccatctc   180
201   tgtgtacaac aggacaacct ccaagggtga cgagaccgtg cagcgtgcca aggcagaagg   240
202   aaaccttccc gtctacggct tccatgacct cgcgtccttt gtgaactcca ttcagaagcc   300
203   acgggtggtg atcatgctcg tcaaggccgg cgcgccagtt gaccagacca tcgcgacgct   360
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212   cagaaccttg cctcaacat tgcagagaaa gggttcccca tctctgtgta caacaggaca   180
213   acctccaagg tggacgagac cgtgcagcgt gccaaggcag aaggaaacct tcccgctctc   240
214   ggcttccatg accccgcgct ctttgtgaag tccattcaga agccacgggt ggtgatcatg   300
215   ctcgtaagg cgggcgcgcc agttgaccag accatcgcca cgctcgagc tcaactggag   360
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224   ccttgcggtc atggggcaga accttgccct caacattgca gagaaagggt tccccatctc   180
225   tgtgtacaac aggacaacct ccaagggtga cgagaccgtg cagcgtgcca aggcagaagg   240
226   aaaccttccc gtctacggct tccatgacct cgcgtccttt gtgaagtcca ttcagaagcc   300
227   acgggtggtg atcatgctcg tcaaggccgg cgcgccagtt gaccagacca tcgcgacgct   360
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236   ggcagcgcgc cagctccata ggaggagatg gcgctcacia gaatcggtct tgctggcctt   180
237   gcggtcatgg ggcagaacct tgccctcaac attgcagaga aagggttccc catctctgtg   240
238   tacaacagga caacctccaa ggtggacgag accgtgcagc gtgccaaggc agaaggaaac   300
239   cttcccgtct acggcttcca tgaccccgcg tcctttgtga agtccattca gaagccacgg   360
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.